IN THE CLAIMS:

1. (Currently amended) A solid oxide fuel cell comprising:

an anode including <u>a first portion of</u> doped-ceria, wherein said <u>first</u> <u>portion of</u> doped-ceria is deposited by colloidal spray deposition;

an electrolyte including <u>a second portion of doped-ceria</u>; and a cathode including at least one cobalt iron <u>manganese</u> based <u>materials</u> <u>material</u>, wherein said fuel cell is capable of operating in the temperature range of 400-700°C.

- 2. (Previously presented) The fuel cell of Claim 1, wherein said anode comprises NiO and doped-ceria.
- 3. (Currently amended) The fuel cell of Claim 1, wherein said <u>first portion of</u> doped-ceria is doped with at least one dopants <u>dopant</u> selected from the group consisting of samarium oxide, gadolinium oxide, yttria oxide, and lanthanide oxide.
- 4. (Currently amended) The fuel cell of Claim 1, wherein said anode, said electrolyte, and said cathode are is porous.
- 5. (Canceled)

- 6. (Previously presented) The fuel cell of Claim 1, wherein said electrolyte comprises material selected from the group consisting of doped-ceria, doped-zirconia with a thin layer of doped-ceria, and a mixture of doped-ceria and doped-zirconia.
- 7. (Previously presented) The fuel cell of Claim 1, wherein said cathode is selected from the group consisting of (La, Sr)(Co, Fe) O₃, and (La, Ca) (Co, Fe, Mn)O₃.

8-11. Canceled

12. (Currently amended) A ceria-based solid oxide fuel cell comprising:

an anode containing <u>first portion of</u> doped-ceria, wherein said <u>first portion of</u> doped-ceria is deposited by colloidal spray deposition;

an electrolyte containing a second portion of doped-ceria;

an electrode containing cobalt iron <u>manganese</u> based <u>materials</u> <u>material</u>; and a fuel selected from the group consisting of hydrogen, methane, methanol, propane, butane and other hydrocarbons.

- 13. (Original) The fuel cell of Claim 12, operating in a temperature range of 400-700°C.
- 14. (Original) The fuel cell of Claim 12, wherein said fuel is composed of hydrogen or methane, and wherein the operating temperature is about 550°C.

- 15. (Previously presented) The fuel cell of Claim 12, wherein said fuel is hydrogen, and said fuel cell has a power output of up to 400mW/cm² at an operating temperature of 550°C.
- 16. (Previously presented) The fuel cell of Claim 12, wherein said fuel is methane, and said fuel cell has a power output of 320mW/cm² at an operating temperature of 500°C.
- 17. (Previously presented) The fuel cell of Claim 12, wherein said anode comprises NiO and doped-ceria.
- 18. (Original) The fuel cell of Claim 17, wherein said electrolyte additionally includes doped-zirconia.
- 19. (Previously presented) The fuel cell of Claim 18, wherein said electrode is selected from the group consisting of (La, Sr) (Co, Fe)O₃ and (La, Ca) (Co, Fe, Mn) O₃.
- 20. (Currently amended) The fuel cell of Claim 19, wherein said <u>first portion of</u> doped-ceria is doped with samarium oxide or gadolinium oxide.